Serial No. 09/780,431

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

In accordance with 37 C.F.R. §1.121(b)(1), please amend the specification by substituting the following paragraphs for the corresponding paragraphs originally filed, as indicated below.

Please replace the paragraph starting on page 1, line 25 and ending on line 35 with the following:

The switching section comprises a plurality of switching elements 112 which switch the path of current directed to coils 114 of the stator 106, and the control section comprises electronic parts 107 which control the switching timing of the switching elements 112. Since the switching elements 112 produce a considerable amount of heat under operation, these elements 112 are attached to a heat sink 115 which is formed with a plurality of heat radiation fins 116. That is, under operation of the motor 100, the heat generated by the switching elements 112 is transmitted to the heat sink [114] 115 and released to the open air [from] by the heat radiation fins 116.

Please replace the paragraph starting on page 2, line 25 and ending on line 29 with the following:

The coils 214a of the stator 214 and the control section 202b of the drive circuit 202 are connected through terminal pins 220 which extend from the coils 214a to bus bars 224 which, in turn are connected to[,] joint bars 222 held by the circuit substrate 212 [and bus bars 224 which connect the joint bars 222 and the terminal pins 220].

Please replace the paragraph starting on page 2, line 30 and ending on page 3, line 2 with the following:

Serial No. 09/780,431

However, employment of the terminal pins 220, joint bars 222 and bus bars 224 for connecting the control section 202b to the coils 214a has caused a troublesome and time-consuming work for assembling the motor 200. For example, for welding given portions of the bus [bard] <u>bars</u> 224 to the joint [bard] <u>bars</u> 222 and the terminal pins 220, it is necessary to precisely hold the bus bars 224 at given positions before carrying out the welding work.

Please replace the paragraph starting on page 11, line 25 and ending on page 12, line 2 with the following:

First, due to provision of the partition wall 80 (see Fig. 1) which functions as a heat blocking wall, the second chamber 10b is protected from being heated by heat generated by the switching elements 31 held in the first chamber 10a. Furthermore, due to the heat sink 32, the heat generated by the switching elements 31 in the first chamber 10a is effectively released to the open air and the heated air in the first chamber 10a is discharged to the open air through the first ventilation opening 11a. Accordingly, the control section 40 of the drive circuit installed in the second chamber 10b is protected from heat. Thus, the electric parts 41 for the control section 40 [don't] do not need [so high heat-proof] to have high heat protection and, thus, they do not need to be as expensive as typical ones.

Please replace the paragraph starting on page 12, line 3 and ending on line 18 with the following:

Second, the second ventilation opening 12b formed in the bottom wall of the lower-half part 12 of the case 10, the second chamber 10b, the clearance 83, the first chamber 10a and the first ventilation opening [12a] 11a formed in the upper-half part 11 of the case 10 constitute a so-called ventilation passage. Under operation of the brushless motor 1A, heated air in the first chamber 10a is discharged to the open air through the first ventilation opening 11a. Due to this air discharging movement, relatively cool air existing near the second ventilation opening 12b is [led] drawn into the ventilation passage from the opening 12b to travel therethrough and is discharged from the first ventilation opening [12a.] 11a. Thus, the

Serial No. 09/780,431

second and first chambers 10b and 10a of the case 10 are cooled and thus the electric parts including the switching section 30 and the control section 40 installed in the chambers are cooled.

Please replace the paragraph starting on page 13, line 10 and ending on line 15 with the following:

Seventh, the outwardly projected part of each terminal pin 16 is covered with the seal member 17 and, thus, is protected from [being rusted] rusting due to moisture attached thereto.

Please replace the paragraph starting on page 14, line 4 and ending on line 11 with the following:

The switching elements 31 are pressed against the aluminum heat sink 32 by means of the spring member 33. The spring member 33 is arranged below the switching elements 31 and fixed to the circuit substrate 62. The heat sink 32 is integrally formed with a plurality of heat radiation fins 32a. The heat sink 32 is secured to the circuit substrate 62. [The spring member 33 is arranged below the switching elements 31 and fixed to the circuit substrate 62.]

Please replace the paragraph starting on page 15, line 8 and ending on line 12 with the following:

In Fig. 12, there is shown a molded flat unit 67 including the wiring bus bar 68 and the connecting bus bars 15, which is a semi-finished product. Fig. 13A shows an earth <u>73</u> (or plus <u>72</u>) terminal [72 or 73] and Fig. 13B shows a signal terminal 74, which are held by the flat unit 67 of Fig. 12.

Please replace the paragraph starting on page 16, line 17 and ending on line 23 with the following:

Serial No. 09/780,431

Second, the connecting bus bars 15 are mounted to the inner case 21 and welding of the terminal pins 16 to the bus bars 15 is carried out after the inner case 21 is fixed to the upper-half part 11 of the case 10. That is, during the welding of the pins 16 to the bus bars 15, the inner case 21 can serve as a positioning tool for the bus bars 15. In case of the conventional brushless motor 200 of Fig. 17, [such took] however, a similar tool is needed.

Please replace the Abstract with the following:

ABSTRACT [OF THE DISCLOSURE:]

A brushless motor [comprises] includes a circuit protecting [case;] case, a holder disposed on the [case;] case, a motor shaft rotatably held by the [holder;] holder, a stator disposed about the holder, a yoke fixed to the motor shaft to rotate therewith, permanent magnets held by the yoke, and a circuit substrate held in the circuit protecting case. The stator includes [and including] a plurality of coils which surround the motor shaft. [shaft; a yoke fixed to the motor shaft to rotate therewith and covering the stator with a given space therebetween; permanent magnets held by the yoke; a circuit substrate tightly held in the circuit protecting case; a drive circuit arranged on the circuit substrate, the] The circuit substrate contains a drive circuit and a control section. The drive circuit [including] includes a switching section which switches the [path of] current path directed to the coils of the stator._ [and a control section which controls a switching timing of the switching section, the switching section including a plurality of switching elements which generate a certain heat when operated.] A partition wall, [is] provided in the circuit protection [case to partition] case, partitions the interior of the case into a first chamber [to which the switching elements of the switching section are exposed] and a second chamber [to which the control section is exposed].

IN THE CLAIMS:

In accordance with 37 C.F.R. §1.121(c)(1), please substitute for original claims 1 and 8 the following rewritten versions of the same claims, as amended.

- 1. (Amended) A brushless motor comprising:
- a circuit protecting case formed of plastic, the circuit case including a partition wall;
- a holder disposed on said case;
- a motor shaft rotatably held by said holder;
- a stator disposed about said holder, said stator including a plurality of coils which surround said motor shaft;
- a yoke fixed to said motor shaft to rotate therewith, said yoke covering said stator with a given space therebetween;

permanent magnets held by said yoke;

- a circuit substrate [tightly] held in said circuit protecting case;
- a drive circuit arranged on said circuit substrate, said drive circuit including a switching section which switches the path of current directed to said coils of the stator and a control section which controls a switching timing of said switching section, said[.] switching section including a plurality of switching elements which generate a certain heat when operated; and
- [a] wherein the partition wall partitions [provided in said circuit protection case to partition] the interior of said circuit protection case into a first chamber to which the switching elements of said switching section are exposed and a second chamber to which said control section is exposed.
 - 8. (Amended) A brushless motor [as claimed in Claim 1, further] comprising: a circuit protecting case;
 - a holder disposed on said case;
 - a motor shaft rotatably held by said holder;
- a stator disposed about said holder, said stator including a plurality of coils which surround said motor shaft;

Serial No. 09/780,431

Attorney Docket No. 040679-1207

a yoke fixed to said motor shaft to rotate therewith, said yoke covering said stator with a given space therebetween;

permanent magnets held by said yoke;

a circuit substrate tightly held in said circuit protecting case;

a drive circuit arranged on said circuit substrate, said drive circuit including a switching section which switches the path of current directed to said coils of the stator and a control section which controls a switching timing of said switching section, said switching section including a plurality of switching elements which generate a certain heat when operated:

a partition wall provided in said circuit protection case to partition the interior of said case into a first chamber to which the switching elements of said switching section are exposed and a second chamber to which said control section is exposed;

terminal pins extending from the coils of said stator; and

connecting bus bars held by an inner case installed in said circuit protection case, each connecting bus bar having on end welded to a given part of said control section of said drive circuit and the other end welded to corresponding one of said terminal pins.